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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,921

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Sai Suresh Ganesamoorthi

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EXAMINER

SHAND, ROBERTA A

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

05/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/645,921

Applicant(s)

GANESAMOORTHY ET AL.

Examiner

Roberta A. Shand

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (U.S. 7426182 B1).

3. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

4. Regarding claims 1 and 2, Wang teaches a system and method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of codecs, at least some of which utilize different amounts of DSP resources (fig. 1 and col. 2, lines 39-67), said method including the steps of: first determining if a particular call can be assigned to a DSP on a best fit basis (fig. 3 and col. 2, line 51 – col. 3, line 3), and if a call can

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not be assigned on a best fit basis, assigning said particular call on a load balancing basis so as to balance the load on the plurality of DSPs (col. 3, lines 3–8).

5. Regarding claims 3-5, Wang teaches a system and method of allocating a plurality of DSPs to handle calls in a voice gateway, said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources (fig. 1 and col. 2, lines 39-67), said method including the steps of: first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in an associated resource group (fig. 3 and col. 2, line 51 – col. 3, line 3), the codecs in each resource group requiring substantially the same amount of resources (col. 6, lines 24-31, Wang teaches codec type G.711 – 12MIPS and codec type G.729a – 25 MIPS); and if the call can not be assigned on a best fit basis, assigning the call to a DSP with a lightest load utilizing a load balancing pool which indicates the number of calls on each DSP (col. 3, lines 3–8 and fig. 4).

6. Regarding claims 6 and 22, Wang teaches (fig. 5) the resource groups take into account which codecs have a same first channel penalty (pre-allocated).

7. Regarding claims 7 and 8, Wang teaches a method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources (fig. 1 and col. 2, lines 39-67), said method including the steps of: establishing a best fit pool which

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has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource (col. 6, lines 24-31, Wang teaches codec type G.711 – 12MIPS and codec type G.729a – 25 MIPS), and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group (fig. 4); establishing a load balancing pool that has a number of call load groups, the DSPs in each call load group handling a same number of calls (col. 2, lines 20-24); first determining if a particular call can be assigned to a DSP based on the information in the best fit pool (fig. 3 and col. 2, line 51 – col. 3, line 3); and if a call can not be assigned on a best fit basis, assigning said particular call on a load balancing basis using the information in said load balancing pool (col. 3, lines 3–8 and fig. 4).

8. Regarding claims 9 and 14, Wang teaches (fig. 4) the calls are assigned on a best fit basis using a best fit pool (plurality of DSPs).

9. Regarding claims 10 and 15, Wang teaches the best fit pool has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource (col. 6, lines 24-31, Wang teaches codec type G.711 – 12MIPS and codec type G.729a – 25 MIPS)), and for each particular resource group said pool indicates which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group (fig. 4).

10. Regarding claims 11 and 16, Wang teaches (col. 3, lines 3–8 and fig. 4) the calls are assigned on a load balancing basis using a load balancing pool.

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11. Regarding claims 12 and 17, Wang teaches (col. 2, lines 20-24) the load balancing pool has a number of call load groups, the DSPs in each call load group handling the same number of calls.

12. Regarding claims 13 and 18-20, Wang teaches (col. 2, lines 57-67) the codecs in each resource group have a same first channel penalty (preallocated).

13. Regarding claim 21, Wang teaches a computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks, said tasks utilizing a plurality of different amounts of resources fig. 1 and col. 2, lines 39-67), said sequences of instructions including instructions for: first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in the associated resource group (fig. 3 and col. 2, line 51 – col. 3, line 3), the codecs in each resource group requiring substantially the same amount of resources (col. 6, lines 24-31, Wang teaches codec type G.711 – 12MIPS and codec type G.729a – 25 MIPS); and if a task can not be assigned on a best fit basis, assigning the task to a resource utilizing a load balancing pool which indicates the number of tasks assigned to each resource (col. 3, lines 3–8 and fig. 4).

14. Regarding claim 23, Wang teaches (col. 1, lines 57-67) the resources are codec utilizing DSP resources.

Allowable Subject Matter

15. Claims 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

16. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A. Shand whose telephone number is (571)272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roberta A. Shand

/R. A. S./

Examiner, Art Unit 2416

/William Trost/

Supervisory Patent Examiner, Art Unit 2416